

What is claimed is:

1. A flange yoke comprising:

a base element defining a longitudinal axis and including a flange plate  
including a first end face and a second end face, a first bearing portion formed  
5 integrally with the flange plate and projecting from the first end face of the flange  
plate and having a first bearing bore defining a first bore axis intersecting  
perpendicularly the longitudinal axis, a first attachment face provided at the first end  
face of the flange plate, a first abutment face extending from the first attachment face  
and arranged on a plane that intersects with its extension the first bore axis, and a  
10 connection face that is arranged on the second end face of the flange plate and that is  
connectable to a mating flange; and

a bearing element having a flange portion that forms a second attachment face  
that abuts the first attachment face of the base element, and a second abutment face  
that abuts the first abutment face of the base element, and a second bearing portion  
15 having a second bearing bore defining a second bore axis arranged co-axially to the  
first bore axis, wherein the bearing element is detachably connected by attachment  
screws to the base element.

2. A flange yoke according to claim 1, characterized in that the attachment  
20 screws are formed as expansion screws.

3. A flange yoke according to claim 1, characterized in that the flange  
portion of the bearing element is provided with first blind holes having internal threads  
that extend parallel to the longitudinal axis, wherein for each blind hole, a first through  
25 bore is arranged in the flange plate of the base element that, starting from the  
connection face, merges in the first attachment face, and wherein first attachment  
screws are passed through said first through bores and rest in said first blind holes.

4. A flange yoke according to claim 3, characterized in that the first attachment screws have screw ends that are countersunk in the connection face.

5. A flange yoke according to claim 1, characterized in that in the flange portion of the bearing element, third blind holes are provided that extend parallel to the longitudinal axis and merge, respectively, in a blind hole with internal thread, and further that for each blind hole, a third through bore is arranged in the flange plate of the base element that starts from the connection face and ends in the first attachment face, wherein the third through bore and the third blind hole have, together, a conical internal face into which a clamping sleeve having a conical outer circumferential face is inserted, and wherein third attachment screws are, respectively, passed through a through bore of a clamping sleeve and rest, respectively, in one of the blind holes with internal thread.

15 6. A flange yoke according to claim 5, characterized in that the third attachment screws have screw ends that are countersunk in the connection face.

7. A flange yoke according to claim 1, characterized in that the first attachment faces and the second attachment face have means for the transmission of torque around the longitudinal axis.

20 8. A flange yoke according to claim 7, characterized in that the first attachment face has a toothing and the second attachment face has a toothing, wherein the toothings are formed complementary to each other.

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9. A flange yoke according to claim 8, characterized in that teeth of the toothing of the first attachment face and teeth of the toothing of the second attachment face extend parallel to the first bore axes.

10. A flange yoke according to claim 1, characterized in that in the first attachment face and in the second attachment face, at least one key and groove connection is provided.

5           11. A flange yoke according to claim 1, characterized in that, in the flange portion of the bearing element, second blind holes having internal threads are provided that extend parallel to the second bore axis, and that for each second blind hole, a second through bore is arranged in the flange plate of the base element that, starts from the second abutment face and ends in an outer circumferential face of the base 10 element, wherein second attachment screws are passed through the second through bores and rest in the second blind holes.

15           12. A flange yoke according to claim 11, characterized in that the second attachment screws have screw ends that are countersunk in the outer circumferential face.

13. A flange yoke according to claim 1, characterized in that the first abutment face and the second abutment face have, respectively, means for the transmission of forces in the plane of the abutment faces.

20           14. A flange yoke according to claim 13, characterized in that the first abutment face and the second abutment face have respective toothings that are formed complementary to each other.

25           15. A flange yoke according to claim 14, characterized in that teeth of the toothing of the first abutment face and teeth of the toothing of the second abutment face extend parallel to the longitudinal axis.

16. A flange yoke according to claim 14, characterized in that teeth of the toothing of the first abutment face and teeth of the toothing of the second abutment face intersect perpendicularly the longitudinal axis with a distance in between.

5 17. A flange yoke according to claim 1, characterized in that, in the second abutment face, recesses are provided, in which, respectively, a fitting member rests that is supported on the first abutment face.

10 18. A flange yoke according to claim 1, characterized in that the connection face has means for centering the flange plate relative to a longitudinal axis of the mating flange.

15 19. A flange yoke according to claim 18, characterized in that the means for centering is formed by a self-centering spur gear, especially a Hirth-spur gear.

20 20. A flange yoke according to claim 1, characterized in that, in the flange plate of the base element, through bores are provided that are equally distributed on a partial circumference around the longitudinal axis in the area of the first attachment face and extend parallel to the longitudinal axis and through which a first partial number of connection screws are passed, and further that for each through bore, a blind hole with internal thread is arranged in the bearing element, wherein the blind holes extend in the extension of the respective through bore of the base element and start from the second attachment face, and wherein the first partial number of connection screws is screwed into the blind holes, and that in the flange plate of the base element, blind holes with internal threads are provided that are equally distributed on the residual partial circumference around the longitudinal axis in the area of the first bearing portion and into which a second partial number of connection screws is screwed.

21. A flange yoke according to claim 1, characterized in that in the flange plate of the base element, through bores are provided, equally distributed on a partial circumference around the longitudinal axis in the area of the first attachment face and extending parallel to the longitudinal axis and through which a first partial number of connection screws is passed, that for each through bore, a through bore is arranged in the bearing element, wherein the through bore extends in the bearing element in extension of the respective through bore of the base element and which, starting from the second attachment face, ends in a second clamping face and wherein the first partial number of connection screws is, starting from the connection face, passed through the through bore of the base element and through the through bore in the bearing element and is screwed into the internal threads of a thread body, supported on the second clamping face, that in the flange plate of the base element, through bores are provided, equally distributed on the residual partial circumference around the longitudinal axis in the area of the first bearing portion, extending parallel to the longitudinal axis and which, starting from the connection face, end in a first clamping face, wherein the second partial number of connection screws is, starting from the connection face, passed through the through bores and is screwed into the internal threads of a thread body, supported on the first clamping face.

20 22. A flange yoke according to claim 21, characterized in that the first clamping face is formed by a first recess in the outer circumferential face of the base element and that the second clamping face is formed by a second recess in the outer circumferential face of the bearing element.

25 23. A flange yoke according to claim 21, characterized in that the thread body is formed by a ring, supported on the first clamping face and on the second clamping face and which is split in a plane, which is formed by the longitudinal axis and the first bore axis.